

June 16, 2003

Tim Kirschbaum, Environmental Engineer
Consolidation Coal Company
P.O. Box 566
Sesser, Illinois 62884

Re: Boundary Modification (Abatement to N03-39-1-1), Consolidation Coal Company,
Emery Deep Mine, C/015/015-AM03B, Outgoing File

Dear Mr. Kirschbaum:

The above-referenced amendment has been reviewed. There are deficiencies that must be adequately addressed prior to approval. A copy of our Technical Analysis is enclosed for your information. In order for us to continue to process your application, please respond to these deficiencies by July 7, 2003.

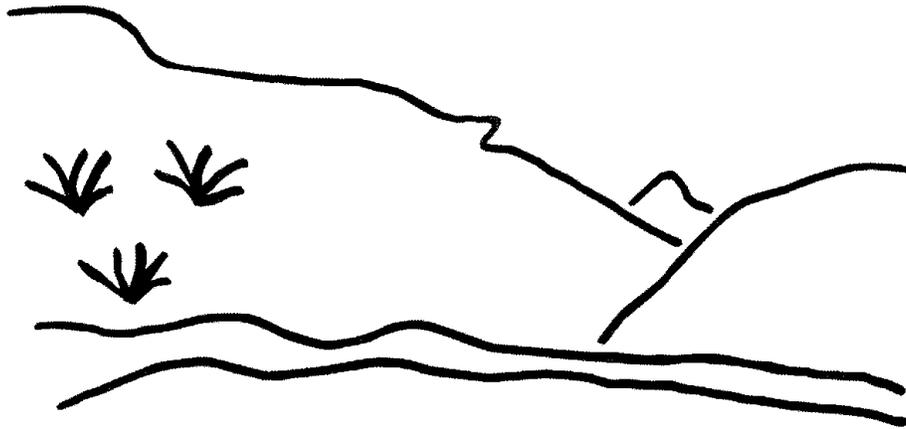
If you have any questions, please call me at (801) 538-5268 or Stephen J. Demczak at (435) 613-5242.

Sincerely,

Pamela Grubaugh-Littig
Permit Supervisor

SJD/sd
Enclosure
cc: Price Field Office
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State of Utah



Utah Oil Gas and Mining

Coal Regulatory Program

Emery Deep Mine
Boundary Modification (Abatement N03-39-1-1)
C/015/015-03B
Technical Analysis
June 9, 2003

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TECHNICAL ANALYSIS

TECHNICAL ANALYSIS

The Division regulates the Surface Mining Control and Reclamation Act of 1977 (SMCRA). When mines submit a Permit Application Package or an amendment to their Mining and Reclamation Plan, the Division reviews the proposal for conformance to the R645-Coal Mining Rules. This Technical Analysis is such a review. Regardless of these analyses, the permittee must comply with the minimum regulatory requirements as established by SMCRA.

Readers of this document must be aware that the regulatory requirements are included by reference. A complete and current copy of these regulations and a copy of the Technical Analysis and Findings Review Guide can be found at <http://ogm.utah.gov/coal>

This Technical Analysis (TA) is written as part of the permit review process. It documents the Findings that the Division has made to date regarding the application for a permit and is the basis for permitting decisions with regard to the application. The TA is broken down into logical section headings which comprise the necessary components of an application. Each section is analyzed and specific findings are then provided which indicate whether or not the application is in compliance with the requirements.

Often the first technical review of an application finds that the application contains some deficiencies. The deficiencies are discussed in the body of the TA and are identified by a regulatory reference which describes the minimum requirements. In this Technical Analysis we have summarized the deficiencies at the beginning of the document to aid in responding to them. Once all of the deficiencies have been adequately addressed, the TA will be considered final for the permitting action.

It may be that not every topic or regulatory requirement is discussed in this version of the TA. Generally only those sections are analyzed that pertain to a particular permitting action. TA's may have been completed previously and the revised information has not altered the original findings. Those sections that are not discussed in this document are generally considered to be in compliance.

INTRODUCTION

INTRODUCTION

The Consolidation Coal Company, Emery Deep Mine, has submitted an amendment to abate Notice of Violation 03-39-1-1 for having coal fines leaving the permit area. The permittee has taken several measures to abate this violation. One of which is to modify the permit boundary. This amendment will allow the permittee to extend the surface disturbance and the permit area to an additional 1.45 acres. This and other actions the permittee feels will contain the coal fines within the disturbed area.

Since the permit area and the disturbed area will be within 100 feet of a public road, the permittee has anticipated publishing a legal notice in the newspaper in Emery County. A public hearing may be requested depending on the comments from the public. All comments will be addressed to the Division of Oil, Gas and Mining.

The site of the 4th East Portal development is in Section 27, T. 22 S. R. 6 E. Salt Lake Meridian (MRP, Section IV.A.2 and Plate IV-3). Portal development in the last year included an excavated material pile (128,000 cu yds), airshaft, a crusher, a 10,000-ton processed coal stockpile, a 100-ton rock dustbin, water tank, storage yard, two retention ponds, and a sediment pond.

Currently, it is estimated that 7,840 cubic yards of topsoil is stored in the topsoil pile and 1,400 cu yds in berms at the 4th East Portal site. [The 7,840 cu yd figure is down from the previous survey (10,600 yds, AM02B-1) and down from the original projection of salvage of 12,000 cu yds (AM02B)].

INTRODUCTION

SUMMARY OF DEFICIENCIES

SUMMARY OF DEFICIENCIES

The Technical analysis of the proposed permit changes cannot be completed at this time. Additional information is requested of the permittee to address deficiencies in the proposal. A summary of deficiencies is provided below. Additional comments and concerns may also be found within the analysis and findings made in this Draft Technical Analysis. Upon finalization of this review, any deficiencies will be evaluated for compliance with the regulatory requirements. Such deficiencies may be conditioned to the requirements of the permit issued by the division, result in denial of the proposed permit changes, or may result in other executive or enforcement action and deemed necessary by the Division at that time to achieve compliance with the Utah Coal Regulatory Program.

Accordingly, the permittee must address those deficiencies as found within this Draft Technical Analysis and provide the following, prior to approval, in accordance with the requirements of:

Regulations

- R645-300-121.120**, A map or description, which clearly shows or describes the precise location and boundaries of the proposed permit area and is sufficient to enable local residents to readily identify the proposed permit area. It may include towns, bodies of water, local landmarks, and any other information, which would identify the location. If a map is used, it will indicate the north direction. 12
- R645-300-121.141**, The permittee will need to update the legal descriptions in chapter 1. This is for purpose of bonding (R645-301-800)..... 10
- R645-301-121.200**, Clarify the references to warm and cool season seed mixes to reflect the actual type of the seed mix..... 37
- R645-301-121.200**, Either assign a separate color code for one of the two notations or edit the map to show a single notation (soil map; Chapter VII). 22
- R645-301-121.200**, Provide the best technology currently available for the cryptogam soil amendment. 48
- R645-301-121.200**, The application should clearly indicate in Chapter II page 17a, that berms on the east, west, and south perimeter of the site are formed of topsoil. 35

SUMMARY OF DEFICIENCIES

- R645-301-222.100**, In Appendix VII-3, ensure that the soil map unit symbols match the soil series names provided. 20
- R645-301-234.220**, (1) The Permittee must remove at least 350 feet of the east perimeter topsoil berm (2.5' high X 3' wide) along with the topsoil beneath the berm, because coal fines are accumulating on the berm to this distance (movement of the entire berm may be preferable).
(2) All remaining topsoil berms on the south, east, and west must be labeled with a sign indicating that they are topsoil. 35
- R645-301-244.100**, The Permittee should provide the Division with opacity readings of the coal stockpile made in accordance with the Air Quality Approval Order prior to and after implementation of the dust control strategies described in the application, so that the Division may evaluate whether the treatment methods described in the application have effectively reduced fugitive dust from the pile. 27
- R645-301-331**, The applicant should attempt to limit coal fine transport off the existing permit area without resorting to adding disturbed area to the permit, unless such disturbed area is required for construction of dust control strategies. 35
- R645-301-333**, Submit a water spray plan that will help maximize the effectiveness of the spray system. Submit a plan that addresses how the Permittee will prevent additional disturbance from coal fines to soil, vegetation, and wildlife in the area east of the coal stockpile. 32
- R645-301-341.210**, Provide a commitment to consult with the Division to determine which interim seed mix to use on all relocated topsoil prior to seeding. 38
- R645-301-341.300**, Retain the integrity of the eastern portion of the southern perimeter berm of the topsoil stockpile in order to maintain monitoring of the native seed mix (warm season). . 37
- R645-301-358**, Submit a plan that describes additional measures to prevent coal fines from blowing off the coal stockpile. These measures must include using the best technology available, such as installation of a silo or could include moving the conveyor system within the hole east of the 4th east portal. 32
- R645-301-420**, The permittee must update the Air Quality Permit and Pages 5a and 6 in Chapter X as per discussion with the Division. 28
- R645-301-422**, Place in the narrative of the application details of communication with the Bureau of Air Quality concerning attempts to provide fugitive dust control and indicate the date of the initial compliance inspection required by the Air Quality Approval Order. 28
- R645-301-521.150, R645-301-521.160, R645-301-521.190 and R645-301-542.300**, The Permittee must show detailed maps of the surface topography for the 4th East Portal area prior to construction, and the operational and reclamation topography. The contour lines must

SUMMARY OF DEFICIENCIES

extend at least 100 feet outside the disturbed area boundaries. Note: the contours shown on the as-built maps received by the Division on May 5, 2003 are different than those in the approved MRP. The maps do not show the new county road that is north of the 4th East Portal area..... 22

R645-301-521.190, The Permittee must give the Division a table that shows the number of permitted and disturbed acres. In addition, the Permittee must also list the number of acres in the permitted area that are owned by the federal government, state government, and fee land. 17

R645-301-542.300 and R645-301-542.310, The MRP must contain backfilling and grading maps and cross-sections for the entire site that include the 1.45 acre addition. The maps must show the final surface configuration..... 49

R645-301-724, Include in the NOV Abatement plans the information recorded from the recently installed weather station for wind speed and direction..... 19

R645-301-830.140, The Permittee must give the Division detailed bond calculations that show the reclamation cost for the 1.45-acre addition..... 49

SUMMARY OF DEFICIENCIES

GENERAL CONTENTS

GENERAL CONTENTS

IDENTIFICATION OF INTERESTS

Regulatory Reference: 30 CFR 773.22; 30 CFR 778.13; R645-301-112

Analysis:

The permittee has updated the ownership and control section in the Mining and Reclamation Plan. This information was checked against the Applicant Violator System (AVS) from The Office of Surface Mining. The names on the AVS system were in the updated officers, and the directors' section of the MRP. However, the permittee has included additional names, which do not appear on the AVS system. The permittee information appears to be more accurate than the AVS information.

Findings:

The information provided in this section meets the minimum requirements of the R645 Coal Rules.

VIOLATION INFORMATION

Regulatory Reference: 30 CFR 773.15(b); 30 CFR 773.23; 30 CFR 778.14; R645-300-132; R645-301-113

Analysis:

The permittee has updated the violation information to Chapter 1 on the Mining and Reclamation Plan. The information is from February 9, 2000 to February 9, 2003.

Findings:

The information provided in this section meets the minimum requirements of the R645 Coal Rules.

RIGHT OF ENTRY

Regulatory Reference: 30 CFR 778.15; R645-301-114

GENERAL CONTENTS

Analysis:

The permittee has submitted this amendment to add 1.45 acres to the permit area. The 1.45 acres is owned by the permittee. This information is stated in the Mining and Reclamation Plan. Therefore, the permittee has the right of entry.

Findings:

The permittee has met the minimum requirements of this section.

LEGAL DESCRIPTION AND STATUS OF UNSUITABILITY CLAIMS

Regulatory Reference: 30 CFR 778.16; 30 CFR 779.12(a); 30 CFR 779.24(a)(b)(c); R645-300-121.120; R645-301-112.800; R645-300-141; R645-301-115.

Analysis:

The legal description of the permit and disturbed area will need to be updated to include the 1.45 additional acres.

The permittee has submitted a map clearly describing the precise location and boundaries of the permit area. This map is Plate I-3.

Findings:

The permittee has not met the minimum requirements of this section. The permittee must meet the following R645 Coal Rule.

R645-300-121.141, The permittee will need to update the legal descriptions in chapter 1. This is for purpose of bonding (R645-301-800).

PERMIT TERM

Regulatory References: 30 CFR 778.17; R645-301-116.

Analysis:

This amendment will not change the permit terms of the Emery Deep permit.

GENERAL CONTENTS

Findings:

The permittee has met the minimum requirements of this section.

PUBLIC NOTICE AND COMMENT

Regulatory References: 30 CFR 778.21; 30 CFR 773.13; R645-300-120; R645-301-117.200.

Analysis:

The permittee has submitted the legal notice for review. The legal notice needs to be more precise on the location of the proposed permit area.

Findings:

The permittee has not met the minimum requirements of this section. The permittee must meet the following R645 Coal Rule.

R645-300-121.120, A map or description, which clearly shows or describes the precise location and boundaries of the proposed permit area and is sufficient to enable local residents to readily identify the proposed permit area. It may include towns, bodies of water, local landmarks, and any other information, which would identify the location. If a map is used, it will indicate the north direction.

FILING FEE

Regulatory Reference: 30 CFR 777.17; R645-301-118.

Analysis:

This is not a requirement for this amendment.

Findings:

The permittee has met the minimum requirements of this section.

PERMIT APPLICATION FORMAT AND CONTENTS

Regulatory Reference: 30 CFR 777.11; R645-301-120.

Analysis:

The permittee has submitted the amendment to fit the existing mining and reclamation plan.

Findings:

The permittee has met the minimum requirements of this section.

REPORTING OF TECHNICAL DATA

Regulatory Reference: 30 CFR 777.13; R645-301-130.

Analysis:

The permittee has used consultants for technical reports such as Montgomery Archaeological and Mt. Nebo Scientific. The appropriate Division staff will review these reports.

Findings:

The permittee has met the minimum requirements of this section.

MAPS AND PLANS

Regulatory Reference: 30 CFR 777.14; R645-301-140.

Analysis:

Maps in this submittal have been reviewed, and the scale distances on the maps are not smaller than 1:24,000.

Findings:

The permittee has met the minimum requirements of this section.

COMPLETENESS

Regulatory Reference: 30 CFR 777.15; R645-301-150.

GENERAL CONTENTS

Analysis:

Completeness determination will not be required for this amendment.

Findings:

The permittee has met the minimum requirements of this section.

GENERAL CONTENTS

ENVIRONMENTAL RESOURCE INFORMATION

ENVIRONMENTAL RESOURCE INFORMATION

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR 783., et. al.

PERMIT AREA

Regulatory Requirements: 30 CFR 783.12; R645-301-521.

Analysis:

The Permittee proposed to increase the permit and disturbed area boundaries by 1.45 acres. The Division needs the Permittee to include a chart or table that shows the number of permitted and disturbed acreage. In addition, the Permittee must also state if the federal government, state government, or private landowners own the land.

Findings:

The information provided by the Permittee is not adequate to meet the requirements of the regulations. Prior to approval, the Permittee must provide the following in accordance with:

R645-301-521.190, The Permittee must give the Division a table that shows the number of permitted and disturbed acres. In addition, the Permittee must also list the number of acres in the permitted area that are owned by the federal government, state government, and fee land.

HISTORIC AND ARCHEOLOGICAL RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.12; R645-301-411.

Analysis:

Montgomery Archeological Consultants surveyed 40 acres of the Emery Mine including the 4th east portal as well as powerline corridor in 2002. The same firm surveyed the 1.45 acre expansion area in March 2003. The 2003 Montgomery results show a site east of the Emery permit boundary. The site number is 42EM2961 and consists of lithic debitage and tools of rock and stone (survey, pg. 6). This site is considered eligible to the NRHP (survey, pg. 7). Emery Mine installed a fence along the site boundary to help protect the site. The consultants determined that with the installation of the fence, there is "No Historic Properties Affected". In

ENVIRONMENTAL RESOURCE INFORMATION

accordance to R645-301-411.142, the Division will seek to obtain clearance by SHPO (State Historic Preservation Officer) for the site.

It is not clear whether the consultants revisited the site following installation of the protective fence. The Division will visit the site to evaluate the level of protection the fence may provide from vandalism. The historic site is near two county roads and may be easily seen. The area of impact caused by coal fines possibly includes this historic site. The Division will also evaluate possible impacts to the site caused by fugitive coal fines.

The Permittee discusses that a part of the Emery mine permit area was placed under the National Trails System in 2002. The amendment refers to Plate X-A-1 to see this designated trail. The map provides a narrative piece discussing this trail.

Findings:

Information provided in the application is considered adequate to meet the minimum Historic and Archeological Resource Information of the Environmental Resource Information requirements.

CLIMATOLOGICAL RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.18; R645-301-724.

Analysis:

Climatological information is provided in Chapter X Part B of the MRP. The Permittee has installed a weather station at the main Emery Mine facilities and initial data were anticipated by January 2003 (Chap. X, Part B, page 5). This weather station will collect rainfall, snowfall, and will record wind speed and direction as well as barometric pressure and temperature.

Findings:

The information provided does not meet the minimum requirements for Climatological Information. Prior to approval, the Permittee must provide the following information, in accordance with:

R645-301-724, Include in the NOV Abatement plans the information recorded from the recently installed weather station for wind speed and direction.

ENVIRONMENTAL RESOURCE INFORMATION

SOILS RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.21; 30 CFR 817.22; 30 CFR 817.200(c); 30 CFR 823; R645-301-220; R645-301-411.

Analysis:

Appendix VII-3 summarizes the information known about the site from the 1981 survey conducted by James P. Walsh & Associates, Inc. of Boulder Colorado.

Addendum 1 to Appendix VII-3 documents a site survey conducted on May 31, 2003 by Mr. James Nyenhuis, Certified Professional Soil Scientist. This survey revised the original soils map, Plate VII-1, for the 4th East Portal Area. The revised map showed less rockland and larger areas covered by Castle Valley soils (now called Hideout Series). The map also included areas of Montwell series soils and Begay series soils.

This submittal provides Appendix VII-4, Letter from Mt. Nebo Consultants – Append 1.45 Ac Area to 4th East Portal Area. The Appendix VII-4 describes Mr. Nyenhuis' March 13, 2003 site visit to survey and map the soils eastward to the County Road. The Division noted that the revised soil map contains map unit symbols that do not match the soil series names provided. This error exists in all previous versions of the map (Addendum 1 to Appendix VII-3 and Appendix VII-3) and should be corrected.

The area of boundary extension is dominated by Castle Valley soils. [Castle Valley series has been renamed Hideout by the Natural Resources Conservation Service (NRCS).]

Mr. Nyenhuis mapped the soil series as follows:

Hideout Soil Series = Loamy, mixed, superactive, calcareous, mesic Lithic Ustic Torriorthents;
Montwel Soil Series = Fine-loamy, mixed, superactive, calcareous, mesic Typic Torriorthents;
Begay Soil Series = Coarse-loamy, mixed, superactive, mesic Ustic Haplocambids;
Persayo Soil Series = Loamy, mixed, calcareous, mesic, shallow Typic Torriorthents;
Chipeta Soil Series = Clayey, mixed, active, calcareous, mesic, shallow Typic Torriorthents.

Findings:

The information provided does not meet the minimum requirements for Environmental Resource Soils. Prior to approval, the Permittee must provide the following, in accordance with:

R645-301-222.100, In Appendix VII-3, ensure that the soil map unit symbols match the soil series names provided.

MAPS, PLANS, AND CROSS SECTIONS OF RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.24, 783.25; R645-301-323, -301-411, -301-521, -301-622, -301-722, -301-731.

Analysis:

Affected Area Boundary Maps

The Permittee proposes to expand the permit boundary for the 4th East Portal area. The expansion of the permit area will consist of 1.45 acres that are located between the current eastern fence and the county road. The location of the permit area expansion is shown on Plate III-1.

Existing Structures and Facilities Maps

There are no existing structures or facilities in the area expansion area. See Plate III-1 in the approved MRP and nothing is shown on the copy received on April 09, 2003.

The Permittee did not give the Division a map that is labeled as preexisting contours. If Plate III-1 is the existing contour map, then the Permittee needs to identify the map as such.

Mine Workings Maps

There are no mine workings associated with the expansion area.

Permit Area Boundary Maps

The permit area boundaries for the 4th East Portal area are shown on several maps including Plate III-1.

The Permittee needs to give the Division one map that shows all the permitted areas for the Emery Deep mine. In addition, the map must also show all disturbed areas. The Permittee must state in the text and on the map that this map is the official permit area boundary map.

Vegetation Reference Area Maps

The soil map in Chapter VII needs clarification. There are two notations for light purple: "B#" and "Be#". The Permittee must either assign a separate color code for one of the two notations or edit the map to show a single notation (R645-301-121.200).

ENVIRONMENTAL RESOURCE INFORMATION

Findings:

The information provided by the Permittee is not adequate to meet the requirements of the regulations. Prior to approval, the Permittee must provide the following in accordance with:

R645-301-521.150, R645-301-521.160, R645-301-521.190 and R645-301-542.300, The Permittee must show detailed maps of the surface topography for the 4th East Portal area prior to construction, and the operational and reclamation topography. The contour lines must extend at least 100 feet outside the disturbed area boundaries. Note: the contours shown on the as-built maps received by the Division on May 5, 2003 are different than those in the approved MRP. The maps do not show the new county road that is north of the 4th East Portal area.

R645-301-121.200, Either assign a separate color code for one of the two notations or edit the map to show a single notation (soil map; Chapter VII).

OPERATION PLAN

OPERATION PLAN

MINING OPERATIONS AND FACILITIES

Regulatory Reference: 30 CFR 784.2, 784.11; R645-301-231, -301-526, -301-528.

Analysis:

The purpose of adding the 1.45-acres is to take remedial action to clean up coal fines that were blown outside the permit boundary. The plan involves removing the coal fines with a vacuum truck, strip, and store the topsoil and construct silt fences and straw bales to contain the coal fines.

Topsoil from the 1.45-acres will be used to construct a replacement berm at the topsoil storage site. Part of the existing berm will be placed in the stockpile storage site.

The addition of 1.45-acres does not alter the mining operation. The plan allows the Permittee to take remedial action to clean up coal fines that have left the site and to install structures to minimize off site impacts.

In addition to the 1.45-acre addition, the Permittee will also take the following act to minimize any off site impacts from coal fines:

- Construct a 20-foot high silt fence along the east fence line of the permit boundary.
- Water lines and sprays will be installed on the transfer chute.
- The coal will be screened before going to the crusher.
- Different chute at the radial stacker will be used.
- Magnesium chloride will be added to the road surface near the portal.
- Coal loadout facility will be modified to reduce coal fines.
- Use of dust control suppressants.

The Division will allow the Permittee to use those methods to control dust. If those measures prove to be inadequate, then the Permittee will have to use other methods such as a tackifier or an enclosed coal silo.

Findings:

The Permittee has met the minimum requirements for the mining operations and facilities section of the regulations.

EXISTING STRUCTURES:

Regulatory Reference: 30 CFR 784.12; R645-301-526.

Analysis:

No existing structure exists at the 1.45-acre site.

Findings:

The Permittee has met the minimum requirements for the existing structures section of the regulations.

RELOCATION OR USE OF PUBLIC ROADS

Regulatory Reference: 30 CFR 784.18; R645-301-521, -301-526.

Analysis:

The 1.45-acre addition will include areas that are within 100 feet of a public road. The 4th East Portal area is within 100 feet of public roads. The Permittee has addressed this issue in the MRP and the Division found those measures adequate.

Findings:

The Permittee has met the minimum requirements for the relocation or use of public roads section of the regulations.

AIR POLLUTION CONTROL PLAN

Regulatory Reference: 30 CFR 784.26, 817.95; R645-301-244, -301-420.

Analysis:

The permittee will need to modify Air Quality Permit since changes have been made such as adding sprays to the belt transfer points and installing a stacking tube.

The permittee and the Division had discussions to modify the "Elimination or Reduction of Coal Fines" in Chapter X on Page 5a and 6. These pages will be changed as per discussions with the Division.

OPERATION PLAN

The facility will handle a capacity of approximately 1,300,000 tons of coal per year (page 17b, Chapter II). Presently, the coal is brought from the mine through a screening/crusher building to a 10,000 ton processed coal stockpile. **A bypass system has been installed** to prevent fine coals from entering the crusher. **A misting system** wets the coal on the conveyors during transit. **An extendable discharge chute has been installed** (Chapter X-C-page 5a) to contain the fines during free fall onto the pile. **A reclaim belt has been installed** to minimize the use of the front-end loader. The R.O.M. surge pile does not exist due to design constraints on the final configuration of the entries and conveyors (Division communication with Seth McCourt, May 8, 2003).

Chapter X. C contains the Air Quality Approval Order (AO) from the Division of Air Quality dated August 5, 2002.

The AO indicates the following:

- The production limit of 1,300,000 tons/yr should not be exceeded (Item 12).
- The ROM surge pile may contain 1,500 tons maximum (Item 12).
- The maximum time period of operation for the 425 hp diesel generator should be 300 hours of operation /12 mo period (using #2 diesel fuel oil, Item 12).
- Visible emissions from conveyor transfer points should not exceed 10% opacity and emissions from all other sources should not exceed 20% opacity. Observations of opacity are to be made in accordance with 40 CFR 60.11 (b) and 40 CFR 60, Appendix A, Method 9 (Item 10).
- Approved site description according to the April 8, 2002 Notice of Intent (Item 6).

Item 9 of the General Conditions listed in the AO requires that Consolidation Coal Company “notify the Executive Secretary in writing when the installation of the equipment listed under the new portal site has been completed.” Mr. McCourt indicated that construction of the site was completed in February of 2003 with the installation of the loadout belt and hopper and that the Executive Secretary had been notified at that time. The initial compliance inspection with Air Quality had not been conducted as of May 8, 2003 (Division communication with Seth McCourt, May 8, 2003).

Findings:

The permittee has not met the minimum requirements of this section. The permittee must meet the following R645 Coal Rule.

R645-301-244.100, The Permittee should provide the Division with opacity readings of the coal stockpile made in accordance with the Air Quality Approval Order prior to and after implementation of the dust control strategies described in the application, so that the Division may evaluate whether the treatment methods described in the application have effectively reduced fugitive dust from the pile.

R645-301-420, The permittee must update the Air Quality Permit and Pages 5a and 6 in Chapter X as per discussion with the Division.

R645-301-422, Place in the narrative of the application details of communication with the Bureau of Air Quality concerning attempts to provide fugitive dust control and indicate the date of the initial compliance inspection required by the Air Quality Approval Order.

COAL RECOVERY

Regulatory Reference: 30 CFR 817.59; R645-301-522.

Analysis:

Coal recovery will not be directly affected by the addition.

Findings:

The Permittee has met the minimum requirements for the coal recovery section of the regulations.

SUBSIDENCE CONTROL PLAN

Regulatory Reference: 30 CFR 784.20, 817.121, 817.122; R645-301-521, -301-525, -301-724.

Analysis:

Subsidence Control Plan

No subsidence will occur in the 1.45-acre addition.

Findings:

The Permittee has adequately addressed the subsidence control requirements of the regulations in the MRP.

SLIDES AND OTHER DAMAGE

Regulatory Reference: 30 CFR Sec. 817.99; R645-301-515.

OPERATION PLAN

Analysis:

The Permittee already has an approved plan for dealing with slides and other damages.

Findings:

The Permittee has met the minimum requirements for the slides and other damage requirements of the regulations.

FISH AND WILDLIFE INFORMATION

Regulatory Reference: 30 CFR Sec. 784.21, 817.97; R645-301-322, -301-333, -301-342, -301-358.

Analysis:

Protection and Enhancement Plan

The prevailing winds at the Emery mine are westerly, therefore, coal fines blow from the coal pile to the east include this 1.45 acres. The Permittee installed a weather station in January 2003 and is currently collecting data. This data should help verify the prevailing wind direction and speed as well as provide diurnal and seasonal wind patterns.

The Permittee is requesting an enlargement of the disturbed area to include an additional 1.45 acres directly to the east of the loadout operation pad. Coal fines blow from the coal pile to this 1.45 acres and beyond. The depth of the coal fines has increased since the NOV was written in January (visual observation). As the coal pile increases, the quantity of coal fines blown to the east will increase.

The measures that the Permittee proposes to reduce coal fines from leaving the permit area are not adequate. At this time, the Permittee has already implemented a few of the abatement measures listed in this amendment. If these measures are reducing the amount of coal fines, the actual amount of reduction is not quantifiable or observable at this time. The amount of coal fines on May 8, 2003 was over 2" in certain points within the 1.45-acre area (Division field visit). This amount is significantly greater than the amount approximated during the January 2003 field visit. Because the mine does not have a program to measure coal fines blown from the stockpile, the amount of coal deposited following abatement installation is unknown.

OPERATION PLAN

It is critical for the Division to adequately determine whether abatement measures are effective for the protection of vegetation and wildlife. Some type of measuring system should be installed to track coal fines. The system should include installation of air quality instrumentation to measure changes in the amount of fugitive dust that leaves the permit area. The Division should consult with the Division of Air Quality and other agencies to determine the most effective method for data collection and analysis.

One of the abatement measures implemented, to date, includes spraying water onto the coal on the conveyor system. The Permittee must submit a water spray plan that includes the following: (R645-301-333)

- Rate and duration of water application.
 - Consider changes in weather.
 - Consider coal fine size and amount.
- Volume of water per spray event.
- Size of spray nozzle (volume of water must be within the spec of the nozzle).
- Plan for nozzle maintenance. Consider wintertime matters.
 - Steps to take to prevent water line freezing.
 - Steps to take when lines freeze.

If the rate or volume of water applied is not adequate, then success of abatement is limited. The water applied to the coal currently comes from the mine and is considered high in precipitates. If the spray nozzles are not properly maintained, the water will plug the nozzles.

The Air Quality chapter includes a section "Protection of Surrounding Environment". It is unclear how increasing the mine disturbance area by 1.45 acres as well as increasing the mine permit boundary east of the county road is "protecting" the environment. It seems that increasing the disturbance area by 1.45 acres may entail the removal of the topsoil and native vegetation and animal life. This removal certainly will not protect the environment, as it existed prior to removal. If the Permittee does not implement a more rigorous abatement program, then the area to the east where coal fines currently blow will increase the impact to soil parameters, vegetation, and wildlife. The Permittee must submit a plan that describes additional measures to prevent coal fines from blowing off the coal stockpile. These measures must include using the best technology available, such as installation of a silo (R645-301-358) or could include moving the conveyor system within the hole east of the 4th east portal. The Permittee must also submit a plan that addresses how the Permittee will prevent additional disturbance from coal fines to soil, vegetation, and wildlife in the area east of the coal stockpile (R645-301-333).

OPERATION PLAN

Findings:

Information provided in the application is not considered adequate to meet the minimum Fish and Wildlife Information requirements of the Operations Plan regulations. Prior to approval, the Permittee must act in accordance with the following:

R645-301-333, Submit a water spray plan that will help maximize the effectiveness of the spray system. Submit a plan that addresses how the Permittee will prevent additional disturbance from coal fines to soil, vegetation, and wildlife in the area east of the coal stockpile.

R645-301-358, Submit a plan that describes additional measures to prevent coal fines from blowing off the coal stockpile. These measures must include using the best technology available, such as installation of a silo or could include moving the conveyor system within the hole east of the 4th east portal.

TOPSOIL AND SUBSOIL

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-230.

Analysis:

Topsoil Removal and Storage

The topsoil stockpile covers one acre (page VI.B.3-188a). Soil was removed from nine acres (page III-21) and stored as shown on as shown on Plate III-1. The storage pile lies on Persayo/Chipeta complex soils. The topsoil stockpile contains 7,840 cu yds down from the previously reported 10,600 cubic yards (page III-21) and about two-thirds of the projected recovery of 12,000 cu yds.

Chapter II page 17a, notes that approximately 1,400 cu yds of topsoil is also stored in berms on the east and west perimeter of the site. Berms on the south end of the disturbed area are also constructed out of topsoil (personal communication with Tim Kirschbaum, May 23, 2003).

Contamination of the topsoil berm along the east perimeter, adjacent to the coal loadout, as well as the undisturbed soil between the eastern disturbed area boundary and the adjacent county road provoked Notice of Violation 03-39-1-1 as modified February 20, 2003 with the following remedial actions:

OPERATION PLAN

- 1) Take steps to reduce coal fines from leaving the permit area.
- 2) Submit a long-term plan (amendment) to control coal fines from leaving the permit area.
- 3) Not to clean coal fines unless the approved amendment requires the removal of the coal fines.

To abate the NOV, the Permittee proposed moving 200 feet of this berm or to the bermed topsoil stockpile and salvaging six inches of soil from the undisturbed but affected area east of the disturbed boundary fence (Chap IV, page 7a).

During a field visit on May 8, 2003, the Division noted the following:

- Approximately 350 feet of the eastern permit boundary topsoil berm is contaminated with coal fines on the surface.
- Mining debris is scattered on parts of the eastern permit boundary topsoil berm and the western permit boundary topsoil stockpile.
- A portion of the contaminated topsoil from the berm along the eastern boundary had been moved to the western disturbed area berm. See photograph taken on 5/08/2003.

Moving the berm will protect the topsoil from further contamination and should be completed. Eighty-four cubic yards from the topsoil berm along the east perimeter fence was moved on April 5, 2003. This portion of the topsoil berm was replaced with straw bales on April 10, 2003 (personal communication with Seth McCourt on May 27, 2003). On May 8, 2003, the Division noted that there was still topsoil remaining underneath the straw bales. The Division also noted that at least 350 feet of the berm had coal fines coming from the stockpile. The Permittee should remember that although the topsoil berm has the dimensions of 2.5' high x 3' wide, it sits on topsoil that also must be salvaged.

All remaining topsoil berms (south, east, and west) must be labeled with a sign indicating that they are topsoil.

Chapter IV describes the procedure the mine will follow to salvage the affected topsoil berm and the undisturbed soil (1.45 acres) to the topsoil stockpile (pg. 7a). The Permittee plans to:

- Reconfigure the southern perimeter berm of the topsoil stockpile by pushing this berm into the existing stockpile.
- Vacuum coal fines from the topsoil berm located along the eastern permit boundary.
- Relocate the topsoil berm located along the eastern permit boundary to the site previously occupied by the western perimeter berm of the topsoil stockpile.
- Salvage six inches of topsoil from the 1.45 acre affected area and place this topsoil in a berm along the southern edge of the topsoil pile.

OPERATION PLAN

- Pock the reconfigured and relocated berms.
- Seed the reconfigured and relocated berms with the “warm season” seed mix.
- Replace the site previously occupied by topsoil berm located along the eastern permit boundary with straw bales stacked end to end.

Addendum 1 to Appendix VII-3 Biological & Soil Resources at the 4th East Portal Area recommends salvage of the soils down to sandstone contact. Depth to sandstone is estimated at 12 inches for the Castle Valley (Hideout) Series soil, which is the predominant soil type in the 1.45-acre addition. The Persayo/Chipeta complex makes up the most affected area of the 1.45 acres. The Division noted that three inches of coal fines has accumulated on this soil after the vacuuming in March. Estimated depth to sandstone for Persayo is 18 inches and for Chipeta is six inches. Therefore, an average depth of salvage for the 1.45 acre area would be 12 inches which could amount to 2,330 cu yds of soil stockpiled from the additional disturbed area.

The Division’s imperative is to promote coal mining in an environmental responsible manner. Removing the topsoil from the additional 1.45-acre disturbed area will not solve the problem of fugitive dust emissions from the coal stockpile. Therefore, the Division requests that the Permittee evaluate other options for reducing fugitive coal fine particles outside the permit area.

Findings:

The information provided does not meet the minimum requirements for Operations Topsoil Subsoil. Prior to approval, the Permittee must provide the following, in accordance with:

R645-301-121.200, The application should clearly indicate in Chapter II page 17a, that berms on the east, west, and south perimeter of the site are formed of topsoil.

R645-301-234.220, (1) The Permittee must remove at least 350 feet of the east perimeter topsoil berm (2.5’high X 3’ wide) along with the topsoil beneath the berm, because coal fines are accumulating on the berm to this distance (movement of the entire berm may be preferable). (2) All remaining topsoil berms on the south, east, and west must be labeled with a sign indicating that they are topsoil.

R645-301-331, The applicant should attempt to limit coal fine transport off the existing permit area without resorting to adding disturbed area to the permit, unless such disturbed area is required for construction of dust control strategies.

VEGETATION

OPERATION PLAN

Analysis:

The Division requires that the Permittee retain the integrity of the eastern portion of the southern perimeter berm of the topsoil stockpile. The Permittee seeded this eastern portion of the berm in 2002 with a “warm” season seed mix. Although the seed mix is not entirely composed of warm season plant species, continued monitoring of this trial mix is still considered valid for the Emery Mine reclaim ability study (R645-301-341.300).

The amendment describes cool and warm season interim seed mixes. The two seed mixes contain neither entirely cool nor warm season species, but contain a combination of warm and cool season species. The Permittee must change all references to warm and cool season seed mixes, in the MRP, to reflect the actual type of the seed mix (R645-301-121.200). The Division suggests replacing the name “warm” and “cool” season interim seed mixes with native and non-native interim seed mixes, respectively. Note that the native interim seed mix contains a high diversity of plant species, whereas the non-native mix contains a relatively low diversity of species.

This memo will refer to these two seed mixes as Native (warm) and Non-native (cool) mixes from this point forward.

The Permittee stabilized the topsoil stockpile at the 4th East Portal by gouging the top and sides of the topsoil stockpile, hydro seeding, and mulching (Ch. IV, p. 7a). The Permittee hydro seeded the top and sides of the topsoil stockpile with the non-native interim seed mix, while traditional broadcast seeding 1/3 of the southern berms with the native interim seed mix. The two seed mixes are neither entirely cool nor warm season species, but both mixes are a combination of warm and cool season species. The following table shows the species used for both mixes and provides the photosynthetic pathway used by these species.

NATIVE - INTERIM MIX ("WARM SEASON")	ACTUAL PHOTOSYNTHETIC PATHWAY	
	COOL = C3 PATH	WARM = C4 PATH
Shadscale	Cool	
Fourwing saltbush		Warm
Castle valley clover	Unknown at this time	
Streambank wheatgrass	Cool	
Scarlet globe mallow	Cool	
Winterfat	Cool	
Blue grama		Warm
Indian rice grass	Cool	
Alkali sacaton		Warm

OPERATION PLAN

<i>NON-NATIVE - INTERIM MIX</i> (“COOL SEASON”)	
Crested wheatgrass	Cool
Fourwing saltbush	Warm
Russian wildrye	Cool

The Permittee agreed to follow a four-phase evaluation of revegetation plans. In phase I, the Permittee will investigate and summarize past reclamation sites and practices at the Emery Deep and Hidden Valley Mines. In phase II, based on those investigations, and in consultation with the Division, the permittee will implement the best techniques demonstrated to be successful. In phase III, the applied techniques will be evaluated qualitatively annually and quantitatively between the 4th and 6th year. These evaluations will be correlated to the precipitation data results obtained from an on-site weather station and incorporated into the annual report. Results of the phase III evaluations may result in additional field trials. The Permittee agreed to submit a full scope of work for this study by the end of March 2003 (Chapter III, Page 4b).

The Permittee must consult with the Division to determine which interim seed mix to use on all relocated topsoil prior to seeding (R645-301-341.210). This requirement is partially based on the unresolved issue concerning the final location of topsoil. If the Permittee relocates the topsoil to form a new topsoil pile, then the Division recommends using the native interim mix (“warm” season). This new stockpile would serve as a study of reclaim ability for Emery. If the Permittee relocates the topsoil to berms surrounding the existing topsoil stockpile (as written in this amendment), then the Division recommends using the non-native interim mix (“cool” season).

Findings:

Information provided in the application is not considered adequate to meet the minimum Vegetation requirements of the Operations Plan regulations. Prior to approval, the Permittee must act in accordance with the following:

R645-301-121.200, Clarify the references to warm and cool season seed mixes to reflect the actual type of the seed mix.

R645-301-341.300, Retain the integrity of the eastern portion of the southern perimeter berm of the topsoil stockpile in order to maintain monitoring of the native seed mix (warm season).

R645-301-341.210, Provide a commitment to consult with the Division to determine which interim seed mix to use on all relocated topsoil prior to seeding.

ROAD SYSTEMS AND OTHER TRANSPORTATION FACILITIES

Regulatory Reference: 30 CFR Sec. 784.24, 817.150, 817.151; R645-301-521, -301-527, -301-534, -301-732.

Analysis:

Road Classification System

No new roads or other transportation facilities will be associated with the 1.45-acre addition.

Findings:

The Permittee has met the minimum requirements of the road and other transportation facilities section of the regulations.

SPOIL AND WASTE MATERIALS

Regulatory Reference: 30 CFR Sec. 701.5, 784.19, 784.25, 817.71, 817.72, 817.73, 817.74, 817.81, 817.83, 817.84, 817.87, 817.89; R645-100-200, -301-210, -301-211, -301-212, -301-412, -301-512, -301-513, -301-514, -301-521, -301-526, -301-528, -301-535, -301-536, -301-542, -301-553, -301-745, -301-746, -301-747.

Analysis:

Excess Spoil:

No new spoil or waste disposal facilities will be contrasted in association with the dust suppression plan.

Findings:

The Permittee has met the minimum requirements of the spoil and waste materials section of the regulations.

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

Analysis:

OPERATION PLAN

General

Plate VI-10a shows the sub-watershed area of 1.7 acres, it includes 0.35 acre of the existing 4th East Portal site. The proposed extension will drain northeast via an 18 inch corrugated metal pipe, under the access road, then to Sedimentation Pond #9. The applicant has provided runoff calculations for the sub-watershed and shows the sedimentation pond is of sufficient size to contain the runoff and sedimentation generated during a 10 yr-24 hr precipitation event.

Transfer of Wells

There are no wells on the 4th East Portal area to seal.

Sediment Control Measures

The areas on the east and west sides of the sub-watershed will be lined with straw bales. Plate VI-10a shows the drainage pattern for the sub-watershed and sediment control structures.

Plate IV-3 shows the proposed surface extension and how it drains to Sedimentation Pond #9. The applicant has provided runoff and sediment volume calculations for an area of 1.45 acres and for a design storm of a 10 yr-24 hr precipitation event. The area specified for the calculations (1.45 acres) differs from Plate VI-10a (1.7 acres), because the applicant has included part of the permitted area in the sub-watershed, thus showing a sub-watershed area of 1.7 acres. The applicant has also submitted SED CAD 4 assessments of the site to predict runoff volumes for the 10 yr-24 hr that will be routed to the culvert and sedimentation pond. Sed Cad assessments were also submitted for the 25 yr-24 hr design event for the emergency spillway.

All calculations show the culvert diameter and sedimentation pond volume are adequate to control runoff from specified areas (shown on Plate VI-10a) and the proposed extension area.

Siltation Structures: Exemptions

No exemptions for siltation structures have been given.

Discharge Structures

The Permittee describes decant structures and emergency spillways to be designed on the sedimentation pond. The pond is designed for total containment for the 10 yr-24 hr precipitation event for an area of 1.45 acres. The emergency spillway is 0.9 feet above the storage level and is designed to discharge flows of the 25 yr- 24 hr precipitation event.

Findings:

The information provided in the application is considered adequate to meet the minimum Hydrologic Resource Information section requirements of the regulations

SUPPORT FACILITIES AND UTILITY INSTALLATIONS

Regulatory Reference: 30 CFR Sec. 784.30, 817.180, 817.181; R645-301-526.

Analysis:

The only support facilities that will be associated with the 1.45-acre addition as shown on Plate IV-3. The new structures include silt fences, silt-fencing material placed on existing chain link fences, and straw bails.

Findings:

The Permittee has met the minimum requirements of the support facilities and utility installations section of the regulations.

SIGNS AND MARKERS

Regulatory Reference: 30 CFR Sec. 817.11; R645-301-521.

Analysis:

The permittee will have to change the disturbed area markers once groundwork begins.

Findings:

The permittee has met the minimum requirements of this section.

USE OF EXPLOSIVES

Regulatory Reference: 30 CFR Sec. 817.61, 817.62, 817.64, 817.66, 817.67, 817.68; R645-301-524.

Analysis:

OPERATION PLAN

General Requirements

No explosives will be used in connection with the expansion of the 1.45-acre site.

Findings:

The Permittee has met the minimum requirements of the use of explosives section of the regulations.

MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-512, -301-521, -301-542, -301-632, -301-731, -302-323.

Analysis:

Affected Area Maps

The Permittee has submitted affected area map on Plate VI-10a.

Mining Facilities Maps

The Permittee submitted maps of the 4th East Portal surface facilities to the Division on April 9, 2003. On May 5, 2003, the Permittee submitted as-built drawings for the 4th East Portal surface area. There are several significant differences between the two maps. The as-built map appears to be the most accurate. Therefore, the Permittee revised the mining facilities maps in the April 9, 2003 submittal so that they show the same information as the as-built drawings submitted on May 5, 2003.

Mine Workings Maps

The mine workings are unaffected by the addition of the 1.45-acre.

Monitoring and Sampling Location Maps

The Permittee has identified dewater pipes on Plate IV-3 where discharge samples will be required when discharge occurs.

Certification Requirements

A registered professional engineer has approved all appropriate maps and cross-sections.

Findings:

The Permittee has submitted the minimum required information for the Maps and Plans section of the regulations.

RECLAMATION PLAN

RECLAMATION PLAN

APPROXIMATE ORIGINAL CONTOUR RESTORATION

Regulatory Reference: 30 CFR Sec. 784.15, 785.16, 817.102, 817.107, 817.133; R645-301-234, -301-412, -301-413, -301-512, -301-531, -301-533, -301-553, -301-536, -301-542, -301-731, -301-732, -301-733, -301-764.

Analysis:

The Permittee proposes to remove the topsoil on the 1.45-acre and then return the topsoil during reclamation. The reclamation plan is simple and will restore the land to the approximate original contour.

Findings:

The Permittee has met the minimum requirements for the approximate original contour restoration section of the regulations.

BACKFILLING AND GRADING

Regulatory Reference: 30 CFR Sec. 785.15, 817.102, 817.107; R645-301-234, -301-537, -301-552, -301-553, -302-230, -302-231, -302-232, -302-233.

Analysis:

General

The backfilling and grading plan for the 1.45-acre addition is simple. The Permittee will remove the topsoil and store it; the topsoil will be returned during final reclamation.

Findings:

The Permittee has met the minimum backfilling and grading requirements.

MINE OPENINGS

Regulatory Reference: 30 CFR Sec. 817.13, 817.14, 817.15; R645-301-513, -301-529, -301-551, -301-631, -301-748, -301-765, -301-748.

Analysis:

No mine openings are associated with the 1.45-acre addition.

Findings:

The Permittee has met the minimum requirements for the mine openings section of the regulations.

ROAD SYSTEMS AND OTHER TRANSPORTATION FACILITIES

Regulatory Reference: 30 CFR Sec. 701.5, 784.24, 817.150, 817.151; R645-100-200, -301-513, -301-521, -301-527, -301-534, -301-537, -301-732.

Analysis:

Reclamation

There are no roads in the 1.45-acre addition.

Findings:

The Permittee has met the minimum requirements of the road systems and other transportation facilities section of the regulations.

REVEGETATION

Regulatory Reference: 30 CFR Sec. 785.18, 817.111, 817.113, 817.114, 817.116; R645-301-244, -301-353, -301-354, -301-355, -301-356, -302-280, -302-281, -302-282, -302-283, -302-284.

Analysis:

Revegetation: General Requirements

Vegetation reference areas were established and quantitatively sampled in 1980 by Stoecher-Keammerer & Associates of Boulder, Colorado. The mixed desert shrub reference area had a vegetative cover of 10.6 percent (Ch. VIII, pg. 19). The raw data is not included in the Mining and Reclamation Plan (MRP). Eleven percent vegetative cover is low from the Division experience in observing vegetative cover on other adjacent sites. However, the reference area and 4th East Portal disturbed area compare equally based on the Division's visual observations.

RECLAMATION PLAN

The vegetative cover of the reference area will be re-measured at the same time as the reclaimed disturbed area by the same observer according to the revegetation guidelines.

The MRP discusses standard revegetation methods to be used at final reclamation. In 20 years, Emery Deep Mine has not stabilized any disturbance on the permit area with vegetation after disturbance. Because of this problem, the Permittee committed to conducting studies of past and future reclamation as described in the Operation Plan, Vegetation section of this technical analysis and as described in Chapter III, Page 4b of the MRP. Demonstrating that the site can be reclaimed is important to obtaining future approval for site disturbance. Transplants, irrigation and/or amendments may be required to establish vegetation. Repeated and continuous efforts at the Hidden Valley Mine and Emery Deep Mine must be made to establish vegetation. The Division may require innovative revegetation procedures and additional materials based on the results of the four-step phase project.

Findings:

Information provided in the application is considered adequate to meet the minimum Revegetation requirements of the Reclamation Plan regulations.

STABILIZATION OF SURFACE AREAS

Regulatory Reference: 30 CFR Sec. 817.95; R645-301-244.

Analysis:

Chapter three discusses biological crusts as part of the reclamation procedures. It is unclear whether the Permittee is going to implement a proactive cryptogams replacement program. The following is also unclear:

- Where the Permittee will harvest the cryptogams?
- What extraction and reapplication protocols the Permittee will follow?
- Why relocation to gouge interior edges provides maximum effect?

In order to obtain maximum benefit from cryptogams replacement, the Permittee must provide a clear, decisive, and technologically advanced plan for the cryptogam soil amendment (R645-301-243; R645-301-121.200).

Findings:

Information provided in the application is not considered adequate to meet the minimum Stabilization of Surface Areas requirements of the Reclamation Plan regulations. Prior to approval, the Permittee must act in accordance with the following:

R645-301-121.200, Provide the best technology currently available for the cryptogam soil amendment.

MAPS, PLANS, AND CROSS SECTIONS OF RECLAMATION OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-323, -301-512, -301-521, -301-542, -301-632, -301-731.

Analysis:

Bonded Area Map

On Plate III-1 the Permittee shows the 23.95 acres of disturbed ground.

Reclamation Backfilling And Grading Maps

The Permittee did not give the Division backfilling and grading maps for the 1.45-acre addition.

Reclamation Facilities Maps

The Permittee does not propose to have any reclamation facilities in the 1.45-acre addition.

Final Surface Configuration Maps

The Permittee did not give the Division final surface configurations maps.

Certification Requirements.

A registered professional engineer certified the reclamation maps that the Permittee did submit.

Findings:

The information provide by the Permittee is not adequate to meet the requirements of the regulations. Prior to approval, the Permittee must provide the following in accordance with:

RECLAMATION PLAN

R645-301-542.300 and R645-301-542.310, The MRP must contain backfilling and grading maps and cross-sections for the entire site that include the 1.45 acre addition. The maps must show the final surface configuration.

BONDING AND INSURANCE REQUIREMENTS

Regulatory Reference: 30 CFR Sec. 800; R645-301-800, et seq.

Analysis:

General

The Permittee did not include any information on reclamation costs for the 1.45-acre addition or any of the structures that will be associated with the coal dust reduction program.

Findings:

The information provide by the Permittee is not adequate to meet the requirements of the regulations. Prior to approval, the Permittee must provide the following in accordance with:

R645-301-830.140, The Permittee must give the Division detailed bond calculations that show the reclamation cost for the 1.45-acre addition.

